AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A structure control method comprising:

measuring a first Raman spectrum of a mixture of nano-scale low-dimensional quantum structures of differing densities of states;

irradiating the mixture of nano-scale low-dimensional quantum structures of differing densities of states with an electromagnetic wave ~~in an oxygen atmosphere~~ in air for two hours after measuring the first Raman spectrum, the electromagnetic wave having an energy density of 10 kW/cm^2 so as to selectively oxidize a low-dimensional quantum structure of a density of states resonating with the electromagnetic wave;

measuring a second Raman spectrum of the irradiated mixture of nano-scale low-dimensional quantum structures; and

measuring a reduction in peak intensity of the second Raman spectrum to confirm the selective oxidation of the low-dimensional quantum structure.

2. (Previously Presented) The structure control method as set forth in claim 1, wherein the selective oxidation removes from the mixture the low-dimensional quantum structure of a density of states resonating with the electromagnetic wave.

3. (Previously Presented) The structure control method as set forth in claim 1, wherein the low-dimensional quantum structures comprise nanotubes or nanoparticles.

4. (Previously Presented) The structure control method as set forth in claim 1, wherein the low-dimensional quantum structures comprise carbon or boron nitride.

5. (Previously Presented) The structure control method as set forth in claim 1, wherein the low-dimensional quantum structures have a single-walled structure.

6. (Previously Presented) The structure control method as set forth in claim 1, wherein the electromagnetic wave is a laser beam.

7. (Withdrawn) A producing method of a nano-scale low-dimensional quantum structure, comprising the step of irradiating a mixture of nano-scale low-dimensional quantum structures of differing densities of states with an electromagnetic wave in an oxygen atmosphere, so as to selectively oxidize a low-dimensional quantum structure of a density of states resonating with the electromagnetic wave and thereby remove a structure with the density of states resonating with the electromagnetic wave.

8. (Withdrawn) A producing method of a nano-scale low-dimensional quantum structure, comprising the step of irradiating a mixture of nano-scale low-dimensional quantum structures of differing densities of states with an electromagnetic wave in an oxygen atmosphere, so as to selectively oxidize a low-dimensional quantum structure of a density of states resonating with the electromagnetic wave and thereby retain a structure with a density of states not resonating with the electromagnetic wave.

9. (Previously Presented) The structure control method as set forth in claim 2, wherein the low-dimensional quantum structures comprise nanotubes or nanoparticles.

10. (Previously Presented) The structure control method as set forth in claim 2, wherein the low-dimensional quantum structures comprise carbon or boron nitride.

11. (Previously Presented) The structure control method as set forth in claim 3, wherein the nanotubes or nanoparticles comprise carbon or boron nitride.

12. (Previously Presented) The structure control method as set forth in claim 2, wherein the low-dimensional quantum structures have a single-walled structure.

13. (Previously Presented) The structure control method as set forth in claim 3, wherein the nanotubes or nanoparticles have a single-walled structure.

14. (Previously Presented) The structure control method as set forth in claim 4, wherein the low-dimensional quantum structures have a single-walled structure.

15. (Previously Presented) The structure control method as set forth in claim 2, wherein the electromagnetic wave is a laser beam.

16. (Previously Presented) The structure control method as set forth in claim 3, wherein the electromagnetic wave is a laser beam.

17. (Previously Presented) The structure control method as set forth in claim 4, wherein the electromagnetic wave is a laser beam.

18. (Previously Presented) The structure control method as set forth in claim 5, wherein the electromagnetic wave is a laser beam.

19–20. (Cancelled)